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American Federation of Teachers AFL-CIO

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ALBERT SHANKER
President

TEACHER SALARY TRENDS

A REPORT OF THE AFT DEPARTMENT OF RESEARCH

In 1979-80, the average teacher salary in a sample of over 1000 school districts surveyed by the Educational Research Services, Inc. was $15,900, an increase of $1,000, or 6.7 percent over 1978-79. Regional salary data show an average 1979-80 classroom teacher salary range of $13,390 for the Southeast to $18,830 for the Far West.

Table 1 shows average salary by region for school years from 1976-77 to 1979-80. Over the three year period the greatest percentage increase in average salary were found in the Great Lakes, Rocky Mountain, Southeast, and Southwest areas, largely reflecting both the population and economic growth on those areas. The lowest percentage gains were found in the Middle Atlantic and Plains states.

While average teacher salary increased 21.2 percent between 1976-77 and 1979-80, the cost of living, as measured by the Consumer Price Index, rose 33.1 percent. Teachers, therefore, suffered an 8.9 percent loss in real income over the three year period.

Table 2 shows average teacher salaries in constant dollars by region from 1976-77 to 1979-80. In no region did the average teacher salary keep up with the cost of living, with the Rocky Mountain states coming closest, losing only 5.8 percent in real purchasing power over three years.

Figure 1 shows the average teacher salary in constant 1979-80 dollars since 1974-75. Since 1977-78, teachers have been particularly hard hit by inflation losing significant purchasing power.

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TABLE 1

AVERAGE CLASSROOM TEACHER SALARIES, U.S. REGION, 1976-77 to 1979-80

	1976-77	1977-78	1978-79	1979-80
U.S.	$13,120	$13,940	$14,900	$15,900
New England	$12,770	$13,600	$14,870	$15,440
Middle Atlantic	14,470	15,070	16,000	17,100
Southeast	10,920	11,730	12,630	13,390
Great Lakes	13,320	14,210	15,200	16,460
Plains	12,210	12,750	13,980	14,580
Southwest	11,660	12,660	13,370	14,260
Rocky Mountains	12,250	13,030	14,050	15,350
Far West	15,480	16,520	17,250	18,830

Note: Salary figures rounded to nearest 10 dollars.

SOURCE: Educational Research Service, Inc., Salaries Paid Professional Personnel in Public Schools, 1976-77 thru 1979-80.

TABLE 2

AVERAGE CLASSROOM TEACHER SALARIES IN CONSTANT DOLLARS,
U.S. REGION, 1976-77 to 1979-80

SALARIES IN CONSTANT 1979-80 DOLLARS

	1976-77	1977-78	1978-79	1979-80	% CHANGE 1976-77 to 1979-80
U.S.	$17,460	$17,400	$16,980	$15,900	- 8.9%
New England	$16,990	$16,980	$16,950	$15,440	- 8.6%
Middle Atlantic	19,260	18,810	18,240	17,100	-11.2
Southeast	14,530	14,640	14,390	13,390	- 7.8
Great Lakes	17,730	17,740	17,320	16,460	- 7.2
Plains	16,250	15,920	15,930	14,580	-10.3
Southwest	15,520	15,800	15,240	14,260	- 8.1
Rocky Mountains	16,300	16,300	16,010	15,350	- 5.8
Far West	20,600	20,620	19,660	18,830	- 8.6

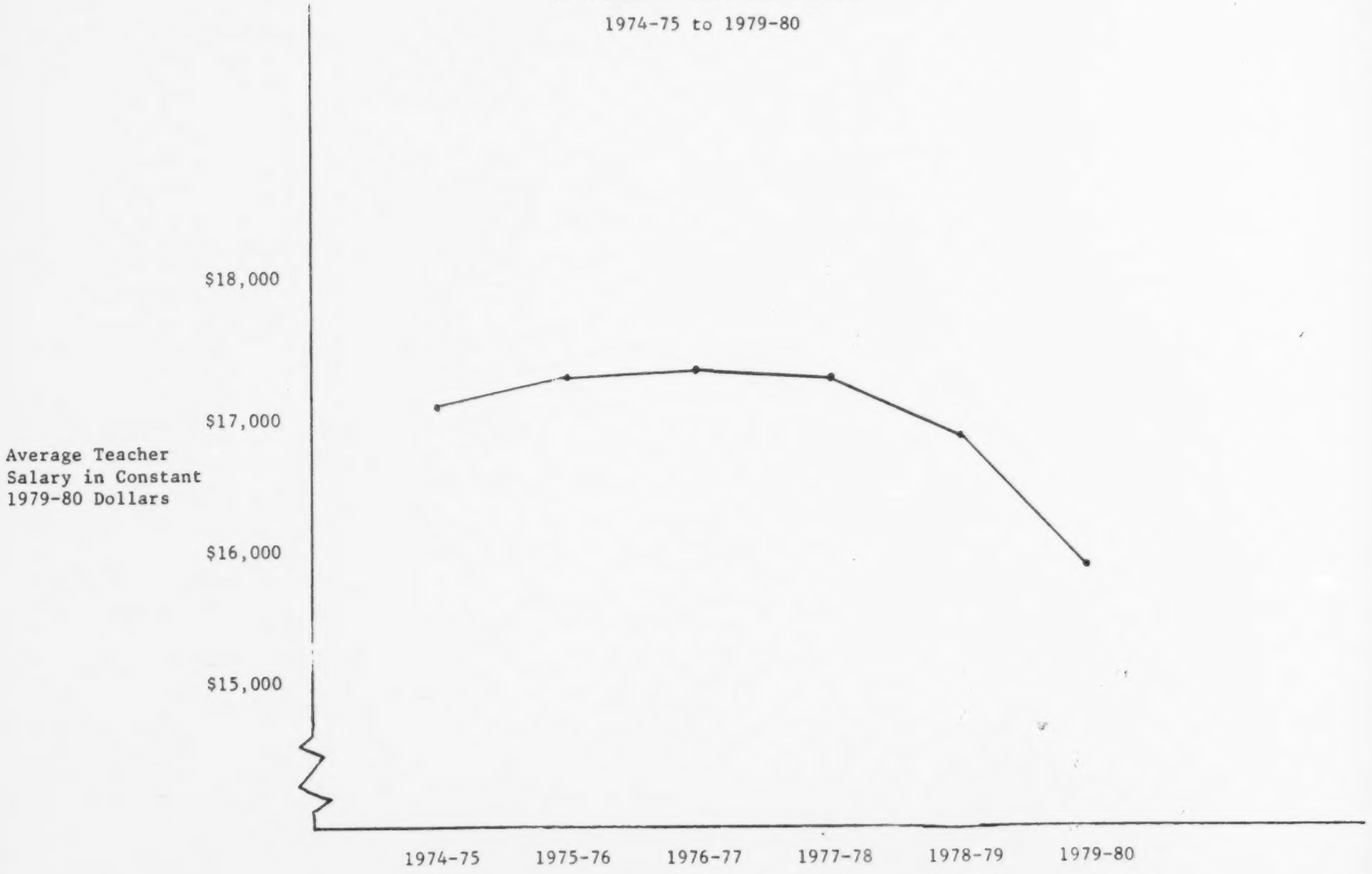
SOURCE: Computed by AFT Department of Research from data in Table 1.

FIGURE 1

AVERAGE CLASSROOM TEACHER SALARY, U.S.

IN CONSTANT (1979-80) DOLLARS

1974-75 to 1979-80



SOURCE: Table 2

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URBAN FISCAL STRESS

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A Report of the AFT Department of Research

prepared by

James G. Ward
Director of Research

The past half decade or so has seen the near bankruptcy of a number of major American cities, including New York, Cleveland, and Chicago. Many more cities seem to be teetering on the edge of this same abyss, while other major urban centers appear to have avoided this plight and seem fiscally healthy.

The purpose of this report is to examine those fiscal indicators that produce stress in city finances and to see how major cities compare on those indicators. It should be stated at the outset that, like in human beings, stress in city finances does not always produce illness, and illness may be present under low stress conditions because of other factors.

An early study of fiscal stress was conducted by Terry Nichols Clark and his associates at the University of Chicago. Reporting in an article entitled, "How Many More New Yorks," in the summer/fall 1976 issue of New York Affairs, Clark discussed the results of this fiscal stress research with a sample of central cities and suburbs of populations as low as 50,000. In this 1976 study, the areas showing the greatest fiscal stress were New York, Boston, Newark, San Francisco, and Albany. Showing very low fiscal stress were Santa Ana and Fullerton, California, Amarillo, Texas, and Salt Lake City. Clark concluded that urban leadership was a critical factor in the fiscal health of cities. This could explain some of the findings presented later in this report.

The AFT Department of Research chose to study the 50 largest cities in the United States because (1) the data were readily available for these cities, (2) the study size was manageable, and (3) the larger cities have traditionally seemed

more prone to fiscal stress.

Six indicators of fiscal stress were used in this study. These were:

1. High per capita city debt
2. High per capita long term city debt
3. High per capita city expenditures
4. High per capita city taxes
5. High percentage of city population below the poverty level
6. Low population increase, or actual population loss.

The first four indicators used data from fiscal year 1977, the poverty figures were from 1969, and the population change was studied between 1970 and 1976.

For each of the indicators, a mean was computed for the 50 city sample. Then, z-scores were computed for each of the indicators for each city showing deviation from the mean. The z-scores on each indicator were summed for each city, seven was added to make all sums positive, and that result was multiplied by ten to provide a composite index for each of the cities. These results are shown in Table 1 with the cities ranked from greatest fiscal stress to lowest fiscal stress.

The city under the greatest fiscal stress is Washington, D.C., followed by New York, San Francisco, and Boston. Other cities with very high fiscal stress are Atlanta, Baltimore, Newark, and Norfolk. Each of these is a potential for fiscal collapse.

Next are 12 cities with high fiscal stress (see Table 2). Each of these cities is not in immediate danger, but still has a high degree of fiscal stress. It is interesting to note that these high stress cities are spread throughout the country in all regions.

There are 16 cities with moderate fiscal stress. Chicago, inspite of all its recent problems, is included among this group. This points out an earlier comment that fiscal problems may exist even with lack of high fiscal stress. In the case of Chicago, the current situation emerges even with a moderate stress index partially because of inacurrate financial reporting (accurate reporting would have caused a higher stress index) and poor financial management by the city administration.

Finally, there are 14 cities with low stress indices. Two of them, San Diego and San Jose, have extremely low indices. The low stress cities tend to be growing cities in the Southwest and West.

The value of this index is not that it tells where financial disaster will occur next, but that it shows which cities have a potential for serious financial

and which cities seem to have a healthy fiscal situation.

For example, tales of financial woe told by city administrations in Boston, Atlanta, or Baltimore may have real substance, while equally strong please in Minneapolis, Milwaukee, or Albuquerque will be without foundation.

JGWard:hjn
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Table 1.
U.S. URBAN FISCAL STRESS INDEX, 50 LARGEST CITIES

1.	Washington, DC	218.8
2.	New York, NY	188.5
3.	San Francisco, Cal.	118.9
4.	Boston, Mass.	112.6
5.	Atlanta, Ga.	109.5
6.	Baltimore, Md.	106.5
7.	Newark, NJ	103.8
8.	Norfolk, Va.	101.2
9.	Philadelphia, Pa.	93.2
10.	Denver, Colo.	87.8
11.	New Orleans, La.	87.5
12.	Memphis, Tenn.	86.8
13.	Cleveland, Ohio	85.2
14.	Nashville, Tenn.	78.9
15.	St. Louis, Mo.	78.7
16.	Cincinnati, Ohio	78.6
17.	Louisville, Ky.	78.2
18.	Oklahoma City, Okla.	75.2
19.	Buffalo, NY	72.0
20.	Detroit, Mich.	70.4
21.	Jacksonville, Fla.	66.5
22.	Kansas City, Mo.	62.6
23.	Baton Rouge, La.	62.4
24.	Omaha, Nebr.	62.2
25.	Seattle, Wash.	61.5
26.	Oakland, Cal.	59.9
27.	Pittsburgh, Pa.	57.8
28.	Ft. Worth, Tex.	55.7
29.	Miami, Fla.	55.6
30.	San Antonio, Tex.	54.8
31.	Los Angeles, Cal.	54.6
32.	Austin, Tex.	53.6
33.	Columbus, Ohio	53.6
34.	Tulsa, Okla.	52.8
35.	Chicago, Ill.	52.5
36.	Dallas, Tex.	51.5
37.	Indianapolis, Ind.	45.0
38.	Long Beach, Cal.	44.8
39.	Minneapolis, Minn.	44.7
40.	Milwaukee, Wisc.	43.6
41.	Houston, Tex.	39.4
42.	Toledo, Ohio	35.9
43.	Tucson, Ariz.	34.6
44.	Albuquerque, N. Mex.	33.9
45.	Phoenix, Ariz.	31.6
46.	Honolulu, Haw.	28.5
47.	Portland, Ore.	28.2
48.	El Paso, Tex.	25.2
49.	San Diego, Cal.	12.9
50.	San Jose, Cal.	2.5

J. G. Ward, February 1980

Table 2.
50 LARGEST U.S. CITIES, URBAN FISCAL STRESS

Very High Stress

Washington
New York
San Francisco
Boston
Atlanta
Baltimore
Newark
Norfolk

High Stress

Philadelphia
Denver
St. Louis
Oklahoma City
New Orleans
Memphis
Cincinnati
Buffalo
Cleveland
Nashville-Davidson
Louisville
Detroit

Moderate Stress

Jacksonville
Kansas City
Baton Rouge
Omaha
Seattle
Oakland
Pittsburgh
Ft. Worth
Miami
San Antonio
Los Angeles
Austin
Columbus
Tulsa
Chicago
Dallas

Low Stress

Indianapolis
Long Beach
Minneapolis
Milwaukee
Houston

Very Low Stress

Toledo
Tucson
Albuquerque
Phoenix
Honolulu
El Paso
Portland

Extremely Low Stress

San Diego
San Jose

J.G. Ward, February, 1980

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AFT RESEARCH REPORT

251 LARGEST U.S. SCHOOL DISTRICTS

1977-78

for further information, contact:
AFT Department of Research
James G. Ward, Director

Public School Enrollment, 1977-78
(enrollment in thousands)

State	Public School Districts of Enrollment of					
	Over 100,000		50,000 to 99,999		20,000 to 49,999	
Alabama			Birmingham	50.8	Huntsville	31.9
			Jefferson Co.	51.5	Montgomery Co.	36.8
			Mobile Co.	68.0		
Alaska					Anchorage	39.6
Arizona			Tuscon Unif.	62.0	Mesa Unif.	34.8
					Phoenix Union HS	29.9
					Scottsdale Unif.	27.0
					Washington El.	27.0
Arkansas					Little Rock	21.1
					Pulaski Co. Spec.	29.7
California	Los Angeles Unif.	650.8	Fresno Unif.	56.1	ABC Unif.	30.4
	San Diego Unif.	121.7	Long Beach Unif.	58.3	Anaheim Union HS	35.6
			Oakland Unif.	57.7	Compton Unif.	32.2
			San Francisco Unif.	65.4	Conego Valley Unif	21.4
			San Juan Unif.	54.8	East Side Un. HS	23.8
					Fremont Unif.	30.0
					Garden Grove Unif.	46.5
					Glendale Unif.	23.4
					Grossmont Un. HS	26.1
					Hacienda-LaPuenta Unif.	34.6
					Hayward Unif.	24.0
					Huntington Beach UN. HS	24.6
					Kern Joint Un. HS	21.2
					Monticello Unif.	28.3
					Mt. Diablo Unif.	43.6
					Newport-Mesa Unif.	23.9
					Norwalk-La Mirada Unif.	25.7
					Orange Unif.	31.1
					Pasadena Unif.	24.9
					Pomona Unif.	24.1
					Richmond Unif.	32.8

State	Over 100,000		50,000 to 99,999		20,000 to 49,999	
					Riverside Unif.	25.7
					Sacramento Unif.	49.1
					San Bernardino Unif.	32.5
					San Jose Unif.	40.5
					Santa Ana Unif.	28.5
					Simi Valley Unif.	26.9
					Stockton Unif.	25.7
					Sweetwater Union HS	28.8
					Torrance Unif.	31.0
Colorado			Denver	71.4	Adams-Arapahoe	21.1
			Jefferson Co.	81.7	Boulder Valley	22.9
					Colorado Springs	33.2
					Pueblo	23.1
Connecticut					Bridgeport	22.8
					Hartford	26.4
District of Columbia	Washington	120.7				
Florida	Broward Co.	136.9	Orange Co.	81.5	Alachua Co.	21.5
	Dade Co.	229.3	Palm Beach Co.	70.7	Brevard Co.	49.7
	Duval Co.	106.0	Pinellas Co.	89.8	Escambia Co.	43.7
	Hillsborough Co.	111.8	Polk Co.	58.7	Lee Co.	28.5
					Leon Co.	21.4
					Manatee Co.	20.1
					Marion Co.	21.5
					Okaloosa Co.	25.1
					Pasco Co.	23.7
					Sarasota Co.	24.3
					Seminole Co.	34.4
					Volusia Co.	35.8
Georgia			Atlanta	79.2	Bibb Co.	27.9
			Cobb Co.	53.0	Chatham-Savannah Co.	33.8
			DeKalb Co.	85.6	Clayton Co.	33.7
					Dougherty Co.	21.4

State	Over 100,000		50,000 to 99,999		20,000 to 49,999	
					Fulton Co.	35.9
					Gwinnett Co.	30.3
					Muscogee Co.	34.7
					Richmond Co.	32.7
Hawaii	Hawaii	171.0				
Idaho					Boise	26.1
Illinois	Chicago	512.1			E. St. Louis	22.2
					Elgin	25.8
					Peoria	22.6
					Rockford	36.1
Indiana			Indianapolis	82.1	Evansville-Vanderburgh	28.2
					Ft. Wayne	39.1
					Gary	36.1
					South Bend	29.5
					Vigo Co.	20.9
					Cedar Rapids	22.0
Iowa					Davenport	22.2
					Des Moines	37.1
Kansas					Kansas City	26.4
					Shawnee Mission	37.2
					Wichita	45.7
Kentucky	Jefferson Co.	112.7			Fayette Co.	34.1
Louisiana			E. Baton Rouge Parish	68.4	Caddo Parish	48.1
			Jefferson Parish	71.9	Calcasieu Parish	36.3
			Orleans Parish	91.4	Lafayette Parish	28.7

State	Over 100,000		500,000 to 99,999		20,000 to 49,999	
Maryland	Baltimore City	152.1	Anne Arundel Co.	75.6	Carroll Co.	20.2
	Baltimore Co.	107.7			Frederick Co.	23.5
	Montgomery Co.	116.8			Harford Co.	33.6
	Prince George's Co.	139.5			Howard Co.	25.6
					Washington Co.	22.4
Massachusetts			Boston	75.6	Brockton	20.6
					Springfield	27.6
					Worcester	25.3
Michigan	Detroit	228.5			Flint	36.7
					Grand Rapids	36.4
					Lansing	29.3
					Livonia	26.7
					Pontiac	21.4
					Utica	28.6
					Warren	29.4
					Wayne-Westland	22.9
Minnesota					Anoka Joint	31.9
					Minneapolis	47.7
					Robbinsdale	21.7
					St. Paul	35.7
Mississippi					Jackson	32.2
Missouri			St. Louis	73.2	Hazelwood	21.1
					Kansas City	42.7
					Parkway	24.5
					Springfield	24.2
Nebraska			Omaha	50.3	Lincoln	27.0
Nevada			Clark Co.	84.3	Washoe Co.	31.9
New Jersey			Newark	67.4	Jersey City	35.1
					Patterson	27.1

State	Over 100,000		500,000 to 99,999		20,000 to 49,999	
New Mexico			Albuquerque	81.6		
New York	New York City	1033.8	Buffalo	52.9	Sachem	20.3
					Syracuse	24.0
					Yonkers	25.3
					Rochester	39.1
North Carolina			Mecklenburg-Charlotte	79.4	Buncombe Co.	24.5
			Wake Co.	56.0	Cumberland Co.	36.5
					Forsyth Co. WS	45.1
					Gaston Co.	35.4
					Greensboro	27.3
					Guilford Co.	26.0
					New Hanover Co.	21.3
Ohio	Cleveland	115.0	Cincinnati	63.1	Akron	45.3
			Columbus	90.9	Dayton	39.1
			Toledo	52.0		
Oklahoma			Tulsa	58.6	Oklahoma City	45.9
Oregon			Portland	57.5	Beaverton	20.5
					Eugene	20.2
					Salem	22.6
Pennsylvania	Philadelphia	244.4	Pittsburgh	51.3		
South Carolina			Charleston Co.	50.6	Aiken Co.	23.6
			Greenville Co.	54.4	Berkeley Co.	21.3
					Richland Co.	31.8
Tennessee	Memphis	124.9	Nashville-Davidson	79.3	Chatanooga	30.7
					Hamilton Co.	22.6
					Knox Co.	29.2
					Knoxville	32.2
					Shelby Co.	25.2
					Sullivan Co.	20.1

State	Over 100,000		500,000 to 99,999		20,000 to 49,999	
Texas	Dallas	136.5	Austin	59.0	Aldine	33.1
	Houston	207.0	El Paso	63.0	Amarillo	26.9
			Ft. Worth	70.0	Arlington	30.6
			San Antonio	64.3	Brownsville	23.0
					Corpus Christi	39.5
					Ector	23.2
					Garland	30.5
					Irving	24.3
					Laredo	21.0
					Lubbock	32.3
					North East	33.4
					Northside	30.9
					Pasadena	36.6
					Richardson	36.6
					Spring Branch	38.5
					Ysleta	42.6
Utah			Granite	60.4	Alpine	22.3
					Davis Co.	36.3
					Jordan	39.6
					Salt Lake City	25.0
Virginia	Fairfax Co.	132.5	Virginia Beach	55.6	Chesapeake	27.1
					Chesterfield Co.	30.9
					Hampton	28.0
					Henrico Co.	34.7
					Newport News	29.2
					Norfolk	44.2
					Portsmouth	21.2
					Prince William Co.	36.5
					Richmond	35.5
					Roanoke	20.9
Washington			Seattle	58.9	Bellevue	21.8
					Edmonds	22.6
					Spokane	30.8
					Tacoma	31.4

State	Over 100,000	500,000 to 99,999		20,000 to 49,999	
West Virginia				Kanawha Co.	44.6
				Wood Co.	20.1
Wisconsin		Milwaukee	99.1	Green Bay	20.7
				Madison	28.1
				Milwaukee Area VT	37.7
				Racine	26.1

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RESEARCH REPORT

TEACHERS AND TESTING

A SURVEY OF KNOWLEDGE AND ATTITUDES

BY

JAMES G. WARD

DIRECTOR OF RESEARCH

A REPORT OF THE
RESEARCH DEPARTMENT OF THE
AMERICAN FEDERATION OF TEACHERS, AFL-CIO

JULY, 1980

TEACHERS AND TESTING: A SURVEY OF KNOWLEDGE AND ATTITUDES

by
James G. Ward
Director of Research
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In the last decade, the subject of the testing of students for aptitude, achievement, and ability has been one of the enduring issues for controversy. While almost all involved in education have recognized the many limitations of current testing technology and the many abuses made of student testing, some have called for the severe curtailment or elimination of testing while others have favored reforms in the process. The reaction to problems in testing has been similar to the response of the Progressive reformers in the first decade of this century who were genuinely concerned about the corruption in government and other social ills they saw in American cities. Some were so appalled they favored the elimination of cities and a return to an illusory pastoral innocence. Others saw the reality of the urban milieu and worked for reforms in governance and administration to correct the sicknesses of the cities. History has vindicated the pragmatic reformers and so, it seems, it will also in testing.

In 1973, the AFT Executive Council adopted a resolution directing the AFT and its staff to study and disseminate information on the use of intelligence, aptitude, and achievement tests. In a 1976 resolution on testing, the AFT called for the responsible use of tests and implored test developers and publishers to improve the understanding of tests among teachers as well as the population at large. This resolution also called upon test developers to improve obvious deficiencies in tests and listed a number of reforms the AFT favored.

This concern for the proper and appropriate use of high quality tests for students led to further action by the AFT.

In 1978, the AFT applied for and received a two year grant from the National Institute of Education to prepare training materials and conduct conferences on improving teachers use of standardized tests. Part of the plan was to survey a representative sample of teachers to ascertain their preparation and knowledge in testing, their assessment of the importance of testing to their teaching

tasks, and their attitudes toward various issues in testing.

The development of the survey instrument and the design of the survey sample were done by the Center for the Study of Evaluation at the University of California at Los Angeles.

In the fall of 1979, 800 survey instruments were mailed to a sample chosen systematically from the AFT membership files to be representative of all AFT members in elementary and secondary teaching. Returned and useable survey forms numbered 209 (26.1 percent), and this analysis is based on that total.

Sample Demography

Those who returned completed survey forms were evenly distributed over all grades in elementary and secondary schools. The distribution showed that 46 percent were elementary school (K-6) teachers, 45 percent taught in secondary schools (7-12), 7 percent taught in both, and 3 percent did not state the grade level taught.

Those surveyed were also asked to indicate the socio-economic status of the community their school serves. The respondents were primarily in communities with middle or low socio-economic status. High socio-economic status communities were indicated by 6 percent of the respondents, middle socio-economic status by 45 percent, low socio-economic status by 39 percent, and 10 percent did not complete this item.

Respondents were also requested to state whether the community the school serves could be characterized as urban, suburban, or rural. According to the responses, 51 percent taught in urban communities, 34 percent in suburban communities, 9 percent in rural communities, and 7 percent did not state community type.

Education and Training in Testing

Before ascertaining the knowledge and attitudes of the respondents, the survey determined the extent of education and training the teachers had in testing.

As Table 1 shows, 29 percent of teachers surveyed had taken no college courses devoted exclusively to testing and measurement and 70 percent had taken no inservice session on the subject. Of the remainder, most (52 percent

Table 1. Education and Training Devoted Exclusively to Testing and Measurement

	College Courses Taken		Inservice Sessions Taken	
	Number	Percent	Number	Percent
None*	61	29%	147	70%
1	61	29	21	10
2	48	23	17	8
3 or More	39	19	24	12

*Includes no response

Table 2. Education and Training Devoted In Part to Testing and Measurement

	College Courses Taken		Inservice Sessions Taken	
	Number	Percent	Number	Percent
None*	49	23%	135	65%
1	44	21	27	13
2	38	18	16	8
3 or more	78	37	31	15

*Includes no response

of the total respondents) had taken 1 or 2 college courses in testing and only 19 percent had more than 2 courses. The record on inservice courses, as shown in Table 1, is even worse.

Those surveyed were also asked to indicate the number of college courses and inservice sessions taken devoted in part to testing and measurement. The results are shown in Table 2. The record here is somewhat better. Only 23 percent had no college courses devoted in part to testing, but 65 percent had no inservice devoted in part to testing.

While no cross-tabulations were done, it appears as though about 1 teacher in 5 has had no formal college training in testing and measurement and that after college that only about 1 in 3 ever get any inservice training in the area. It is clear that more training for teachers in testing is needed, particularly at the inservice level, to improve the use of tests.

Teacher Expertise in Testing

Nine issues or topics in testing were chosen and teachers in the survey were asked to indicate their assessment of the importance to them of expertise in those areas and were also asked to assess their own expertise in each of those areas. Those results are presented in Tables 3 and 4.

As shown in Table 3, teachers felt that "how to select good tests" and "how to judge the appropriateness of required tests" were the most important areas in which teachers should have expertise, followed by "how standardized tests are developed," "how to evaluate minimum competency testing program," and "how to interpret norm and percentile scores." Also rated high were "how technical qualities of a test influence what scores mean" and "how to use test results in instructional planning." The only topics rated less than 3 in importance (on a scale of 1 to 4) were "truth in testing legislation" and "what rights and responsibilities are associated with testing."

As Table 4 shows, only one topic was rated by teachers as high as 3 on the same 1 to 4 scale in their own estimated level of expertise. The area rated at 3.0 was "how to use test results in instructional planning." Other areas ranked high in estimated expertise were "how to interpret norm and percentile scores," "how to judge the appropriateness of required tests," and "how to select good tests." Particularly low levels of expertise were indicated

Table 3. Teachers' Rating of Importance of Expertise in Areas of Testing

Area of Testing	Average Rating (1=Low, 4=High)	Percentage Indicating High Importance	Low Importance
How to select good tests	3.4	57%	5%
How to judge the appropriateness of required tests	3.4	52	4
How standardized tests are developed	3.3	46	6
How to evaluate minimum competency testing programs	3.2	41	4
How to interpret norm and percentile scores	3.2	40	4
How the technical qualities of a test influence what score means	3.1	37	7
How to use test results in instructional planning	3.1	34	7
Truth-in-testing legislation	2.8	23	12
What rights and responsibilities are associated with testing	2.7	22	15

Table 4. Teachers' Estimated Level of Expertise in Areas of Testing

Area of Testing	Average Rating (1=low, 4=High)	Percentage Indicating High Expertise	Low Expertise
How to use test results in instructional planning	3.0	27%	7%
How to interpret norm and percentile scores	2.8	24	12
How to judge the appropriateness of required tests	2.7	21	11
How to select good tests	2.5	12	15
How the technical qualities of a test influence what score means	2.4	12	20
How to evaluate minimum competency testing programs	2.3	12	22
What rights and responsibilities are associated with testing	2.2	13	27
How standardized tests are developed	2.1	7	32
Truth-in-testing legislation	1.9	6	41

for "how standardized tests are developed" and "truth-in-testing legislation."

The greatest discrepancy exists in the area of "how standardized tests are developed" where importance was rated at 3.3, but expertise at 2.1. Other areas where a great discrepancy was indicated included "how to select good tests," "how to evaluate minimum competency testing programs," and "truth-in-testing legislation."

Use of Standardized Tests

Survey recipients were asked compared to other information they have about students, to what extent do they use standardized test results in their instructional planning. On a scale from 1 (unimportant) to 4 (important), the uses were rated as follows:

Diagnosis of individual needs	2.8
Student placement/grouping	2.7
Determining class needs	2.5
Judging student progress	2.5
Modification of your course content	2.4
Evaluation of your instructional program	2.4

Teachers indicate greater use of test results for individual student decision than for group decisions.

Factors Which Inhibit Use of Standardized Tests

Conversations with teachers often reveal that teachers feel that standardized tests have problems that inhibit their usefulness to them. Survey respondents were asked to indicate, from a list of eleven problems, which major problems prevent them from more fully using standardized test results. Table 5 presents those results.

The two factors mentioned most often relate to the desire by classroom teachers for more useful information on diagnosis of individual student strengths and weaknesses and prescriptive information to provide guidance for corrective action.

There was also concern with the timing of return of test results, if they are returned to the teachers at all, the test/curriculum match, and the appropriateness of test materials for some students.

It is clear from these results that teachers use standardized test results

Table 5. Factors Which Inhibit Teacher Use of Standardized Tests

	Factor	Percentage Indicating Factor As A Major Problem
1.	Results do not provide an adequate profile of student strengths and weaknesses.	63%
2.	Results do not provide prescriptive information, e.g. guidance as to what materials, instructional activities are needed.	52
3.	Results are returned too late to be useful, or are not returned to teachers.	51
4.	Test content does not match my curriculum.	47
5.	Test materials are inappropriate and/or biased for at least some of my students.	46
6.	Comparison groups (norms) provided by the tests are not meaningful.	29
7.	Results are not reported in a form that facilitates interpretation.	29
8.	Results do not give me any new information about my students.	27
9.	Tests are given at the wrong time of the year.	26
10.	Tests take too long to administer.	23
11.	Technical quality of tests is inadequate.	17

to help make decisions about individual students relating to diagnosis of needs, grouping, and placement, but that teachers recognize the limitations of such tests for these purposes. There seems to be a clearly perceived need for more and better information about students and a desire to improve standardized tests to provide that information.

Minimum Competency Testing

Slightly below 60 percent of the teachers surveyed stated that their school district has a minimum competency testing program, and in 81 percent of these cases it is state mandated.

	Number	Percent
No minimum competency testing program	84	40
Has minimum competency testing program	125	60
State mandated	101	48
Locally mandated	24	11

Those in districts with minimum competency testing programs were asked to answer a series of questions about their program. Those results are presented in Table 6.

The results show the following findings:

- o teachers were not involved in selecting competencies.
- o teachers were not involved in setting passing scores.
- o teachers are mixed as to whether competencies reflect classroom goals.
- o competency test results seem to provide information for planning remedial work, but teachers receive little assistance in doing this.
- o teachers are mixed as to whether school programs have changed much as a result of competency tests, and are also mixed about whether important curricular goals have been ignored.
- o teachers are divided, with slight leaning toward a positive opinion, about whether competency tests will increase quality instruction.

Given these findings, it is interesting to look at teachers' general attitude toward minimum competency testing. These results are presented in Table 7. While a large segment of teachers expressed a neutral attitude (34 percent),

Table 6. Details About Minimum Competency Testing Programs

	Percentage of Respondents Indicating				
	To A Great Extent	Mostly Yes	Mostly No	Not At All	Not Sure/ No Response
a. Were teachers involved in selecting the competencies to be tested?	5%	11%	10%	45%	29%
b. Were teachers involved in setting passing scores?	4	9	10	43	34
c. Do the competencies reflect your classroom goals for students?	11	32	22	20	15
d. Do the results provide sufficient information so that remedial work for students can be planned?	17	27	26	8	22
e. Has your school or instructional program changed because of the test?	17	21	24	23	15
f. Have important curricular goals been ignored due to emphasis on minimum competency?	14	20	19	29	17
g. Do you receive assistance in interpreting the test results and/or planning remedial work for students?	9	15	23	39	15
h. Do you think minimum competency testing will help promote higher quality instruction for students?	18	28	18	17	18

Table 7. Teacher Attitudes Toward Minimum Competency Testing

Attitude	Number	Percent
Very Favorable	38	18%
Favorable	40	19
Neutral	71	34
Unfavorable	24	12
Very Unfavorable	16	8
No Response	20	10

some 37 percent indicated a generally favorable attitude and 20 percent an unfavorable attitude.

Conclusion

Teachers seem to be generally supportive of standardized tests. They understand the need for quality standards in education and they want more useful information about their students. Particularly, teachers want information to help them in:

- o diagnosing individual student needs
- o planning instructional activities and programs
- o placing and grouping students.

To teachers, testing should be an integral part of the instructional programs and there should be a high match between tests and the curriculum. Teachers seem somewhat supportive of minimum competency testing, but they see many serious flaws in most current programs in this area.

Most significantly, teachers want to improve standardized tests, not eliminate them.

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AFT RESEARCH REPORT

TEACHER SALARY AND MEMBERSHIP IN AN EMPLOYEE ORGANIZATION

A study completed by the AFT Department of Research shows that there is a strong relationship between teacher salary and membership in an employee organization. The study shows a high correlation between average teacher salary in a state and the percentage of full time teachers who belong to an employee organization (AFT, NEA, or others). The greater the percentage of teachers belonging to an organization, the higher the state average teacher salary.

Using data from 48 states (Alaska and Hawaii were excluded because of high cost of living differentials), the study showed that for every 1 percent increase in the number of teachers who belonged to an employee organization, the teachers in the state could expect approximately an additional $100 per year in salary.

The states with over 90 percent of full time teachers belonging to an employee organization in October 1978 had some of the best paid teachers. Rhode Island (92 percent belonging), Massachusetts (91 percent), and Minnesota (91 percent) all had average teacher salaries above the national average.

Highest average teacher salaries were found in New York (85 percent belonging), Washington (87 percent), California (70 percent), and Michigan (89 percent). Lowest teacher salaries were found in Mississippi (23 percent belonging) and Arkansas (40 percent).

The least organized states were generally those in the South and Southwest. States with fewer than 50 percent of full time teachers belonging to an employee organization include Mississippi (23 percent), South Carolina (37 percent), Arkansas (40 percent), Georgia (42 percent), Louisiana (46 percent), Texas (46 percent), and New Mexico (47 percent). Virginia was just over the 50 percent mark at 51 percent.

The attached table shows the complete data for all states.

Attachment

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STATE	PERCENTAGE OF FULL TIME TEACHERS BELONGING TO AN EMPLOYEE ORGANIZATION OCTOBER 1978	AVERAGE SALARY 1977-78
United States	69 percent	$14,836
New England		
Maine	76	12,000
New Hampshire	66	11,600
Vermont	72	11,799
Massachusetts	91	16,100
Rhode Island	92	14,963
Connecticut	85	15,191
Middle Atlantic		
New York	85	18,470
New Jersey	84	16,175
Pennsylvania	85	14,950
East North Central		
Ohio	70	13,925
Indiana	68	14,034
Illinois	70	16,000
Michigan	89	18,144
Wisconsin	86	14,400
West North Central		
Minnesota	91	15,584
Iowa	76	13,205
Missouri	62	12,476
North Dakota	64	11,667
South Dakota	64	11,546
Nebraska	79	12,328
Kansas	58	12,607
South Atlantic		
Delaware	65	14,403
Maryland	77	16,580
District of Columbia	58	N/A
Virginia	51	13,400
West Virginia	55	12,517
North Carolina	60	13,334
South Carolina	37	11,905
Georgia	42	12,766
Florida	58	11,770

STATE	PERCENTAGE OF FULL TIME TEACHERS BELONGING TO AN EMPLOYEE ORGANIZATION OCTOBER 1978	AVERAGE SALARY 1977-78
East South Central		
Kentucky	56 percent	12,465
Tennessee	71	12,122
Alabama	63	12,109
Mississippi	23	10,800
West South Central		
Arkansas	40	10,404
Louisiana	46	14,161
Oklahoma	59	11,700
Texas	46	13,300
Mountain		
Montana	58	13,293
Idaho	66	12,142
Wyoming	72	14,502
Colorado	64	14,616
New Mexico	47	15,525
Arizona	62	16,860
Utah	84	13,588
Nevada	61	14,970
Pacific		
Washington	87	17,029
Oregon	75	14,031
California	70	17,890
Alaska	70	23,262
Hawaii	97	18,056

SOURCE: (1) U.S. Department of Commerce, Bureau of the Census and U.S. Department of Labor, Labor-Management Services, Labor-Management Relations in State and Local Governments: 1978.

(2) Department of Health, Education, and Welfare, National Center for Education Statistics, Digest of Education Statistics 1979.

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RESEARCH REPORT

PROJECTIONS OF THE POPULATION OF VOTING AGE FOR STATES: NOVEMBER 1980

BY

JAMES G. WARD

DIRECTOR OF RESEARCH

A REPORT OF THE
RESEARCH DEPARTMENT OF THE
AMERICAN FEDERATION OF TEACHERS, AFL-CIO

SEPTEMBER, 1980

Table 1. Projections of the Population of Voting Age by Age and Race for States: November 1980

(In thousands. Population 18 years old and over. Includes Armed Forces in each State)

Region, division, and State	Population of voting age	Age				Race	
		18 to 24 years	25 to 44 years	45 to 64 years	65 years and over	White	Black
United States, total	160,491	29,227	62,280	43,910	25,074	140,558	16,967
Regions:							
Northeastern States	36,061	6,111	13,489	10,491	5,970	32,323	3,292
North Central States	42,066	7,828	16,318	11,348	6,573	38,256	3,443
The South	51,945	9,537	20,227	13,893	8,288	42,743	8,718
The West	30,418	5,751	12,247	8,179	4,242	27,238	1,514
Northeast:							
New England	9,112	1,636	3,459	2,520	1,496	8,765	302
Middle Atlantic	26,950	4,475	10,031	7,970	4,474	23,578	2,990
North Central:							
East North Central	29,598	5,530	11,629	8,035	4,405	26,468	2,886
West North Central	12,468	2,299	4,688	3,312	2,168	11,787	557
South:							
South Atlantic	23,736	4,663	9,874	6,906	4,292	20,773	4,724
East South Central	10,089	1,816	3,943	2,721	1,608	8,296	1,747
West South Central	16,121	3,057	6,409	4,266	2,388	13,676	2,247
West:							
Mountain	7,661	1,525	3,058	2,021	1,057	7,263	175
Pacific	22,757	4,225	9,189	6,157	3,186	19,994	1,339
New England:							
Maine	790	139	290	224	137	785	(1)
New Hampshire	657	117	264	176	100	653	(1)
Vermont	359	67	146	89	56	355	(1)
Massachusetts	4,298	791	1,617	1,174	715	4,111	153
Rhode Island	687	122	247	193	125	661	20
Connecticut	2,321	400	894	664	343	2,180	125
Middle Atlantic:							
New York	12,900	2,172	4,852	3,766	2,110	11,025	1,648
New Jersey	5,398	886	2,037	1,619	856	4,710	615
Pennsylvania	8,652	1,418	3,141	2,586	1,508	7,843	727
East North Central:							
Ohio	7,701	1,419	3,009	2,124	1,149	6,931	724
Indiana	3,849	715	1,522	1,038	573	3,566	269
Illinois	8,046	1,481	3,122	2,221	1,222	6,906	1,028
Michigan	6,557	1,263	2,657	1,738	898	5,739	770
Wisconsin	3,446	652	1,318	914	562	3,325	95
West North Central:							
Minnesota	2,957	568	1,170	745	473	2,899	30
Iowa	2,093	364	773	575	381	2,061	29
Missouri	3,569	643	1,340	951	636	3,156	385
North Dakota	469	92	166	130	81	456	(1)
South Dakota	485	91	166	138	91	459	(1)
Nebraska	1,138	212	421	301	204	1,095	33
Kansas	1,756	328	653	472	303	1,661	76
South Atlantic:							
Delaware	420	83	167	112	58	361	58
Maryland	3,039	584	1,247	821	387	2,388	610
District of Columbia	475	99	186	117	72	149	316
Virginia	3,817	765	1,539	1,016	496	3,105	665
West Virginia	1,357	210	513	407	227	1,308	42
North Carolina	4,055	746	1,627	1,093	589	3,216	796
South Carolina	2,069	407	844	540	279	1,483	573
Georgia	3,629	702	1,505	920	502	2,743	867
Florida	6,876	1,066	2,247	1,880	1,683	6,019	796
East South Central:							
Kentucky	2,532	462	991	684	396	2,348	174
Tennessee	3,205	551	1,275	875	503	2,742	450
Alabama	2,702	490	1,046	736	430	2,077	609
Mississippi	1,650	313	631	426	280	1,127	515
West South Central:							
Arkansas	1,562	257	580	420	305	1,303	217
Louisiana	2,780	557	1,110	729	384	2,007	759
Oklahoma	2,131	376	811	577	367	1,913	139
Texas	9,648	1,867	3,908	2,541	1,333	8,454	1,132
Mountain:							
Montana	560	104	213	158	84	538	(1)
Idaho	634	118	250	172	94	623	(1)
Wyoming	335	65	135	99	37	323	(1)
Colorado	2,050	420	871	514	245	1,951	70
New Mexico	869	182	339	234	114	795	15
Arizona	1,779	329	673	469	308	1,640	48
Utah	901	206	366	220	109	882	(1)
Nevada	533	101	210	156	66	492	31
Pacific:							
Washington	2,978	552	1,228	771	427	2,824	67
Oregon	1,909	324	766	517	302	1,851	25
California	16,956	3,140	6,809	4,636	2,372	14,866	1,230
Alaska	257	63	126	57	11	209	(1)
Hawaii	657	146	261	176	74	244	(1)

[1]Numbers not shown where less than 10,000 living in States.

Table 2. Summary of Selected Characteristics of the Voting-Age Population: November 1, 1980 and April 1, 1970

(Population 18 years old and over. Includes Armed Forces in each State)

Region, division, and State	Voting-age population as percent of total population	Percent of voting-age population										Median age, 1970	Percent change since 1976
		1980 projection						1970 census					
		Under 25 years	25 to 44 years	45 to 64 years	65 years and over	Black	Other races[1]	Spanish origin[2]	Asian Americans[3]	American Indians	Females		
United States, total	72.2	18.2	38.8	27.4	15.6	10.6	1.8	3.8	0.7	0.3	52.5	43.0	6.9
Regions:													
Northeast	73.9	16.9	37.4	29.1	16.6	9.1	1.2	3.9	0.4	0.1	53.4	44.3	2.5
North Central	71.9	18.6	38.8	27.0	15.6	8.2	0.9	1.9	0.2	0.2	52.5	43.3	5.1
South	71.5	18.4	38.9	26.7	16.0	16.8	0.9	4.4	0.2	0.3	52.5	42.3	8.5
West	71.9	18.9	40.3	26.9	13.9	5.0	5.5	9.7	3.0	0.9	51.4	41.5	12.6
Northeast:													
New England	74.0	18.0	38.0	27.7	16.4	3.3	0.7	1.2	0.3	0.1	53.1	43.9	5.1
Middle Atlantic	73.8	16.6	37.2	29.6	16.6	11.1	1.4	4.7	0.5	0.1	53.5	44.5	1.7
North Central:													
East North Central	71.6	18.7	39.3	27.1	14.9	9.8	0.8	2.1	0.3	0.1	52.5	42.9	4.7
West North Central	72.5	18.4	37.6	26.6	17.4	4.5	1.0	1.2	0.2	0.4	52.4	44.3	6.0
South:													
South Atlantic	72.8	18.1	38.4	26.8	16.7	18.4	0.9	2.0	0.2	0.2	52.4	42.2	7.8
East South Central	70.7	18.0	39.1	27.0	15.9	17.3	0.5	1.2	0.1	0.1	52.8	42.8	7.2
West South Central	70.0	19.0	39.8	26.5	14.8	13.9	1.2	10.3	0.2	0.6	52.3	42.2	10.6
West:													
Mountain	69.2	19.9	39.9	26.4	13.8	2.3	5.2	10.7	0.5	0.2	51.3	41.1	15.5
Pacific	72.9	18.6	40.4	27.1	14.0	5.9	6.3	9.3	3.7	0.5	51.4	41.7	11.6
New England:													
Maine	71.6	17.6	36.7	28.4	17.3	0.2	0.4	(4)	0.1	0.2	52.4	44.5	6.3
New Hampshire	72.3	17.8	40.2	26.7	15.3	0.3	0.4	(4)	0.2	0.1	52.3	43.2	13.7
Vermont	71.7	18.7	40.8	26.9	13.7	(Z)	1.0	(4)	0.1	0.1	52.5	42.8	8.8
Massachusetts	74.6	18.4	37.6	27.3	16.6	3.6	0.8	(4)	0.6	0.1	53.8	44.1	4.0
Rhode Island	74.3	17.7	36.0	28.1	18.2	2.9	0.8	(4)	0.6	0.1	51.7	44.1	2.7
Connecticut	74.6	17.2	38.5	28.6	15.6	5.4	0.7	(4)	0.2	0.1	52.7	43.7	4.9
Middle Atlantic:													
New York	73.7	16.8	37.6	29.2	16.4	12.8	1.8	6.3	0.7	0.1	53.7	44.1	0.3
New Jersey	73.5	16.4	37.7	30.0	15.9	11.4	1.4	3.5	0.3	0.1	52.9	44.1	4.3
Pennsylvania	74.1	16.4	36.3	29.9	17.4	8.4	0.9	0.8	0.2	(Z)	53.4	45.2	2.3
East North Central:													
Ohio	71.9	18.4	39.1	27.6	14.9	9.4	0.6	1.0	0.2	0.1	52.9	42.9	3.8
Indiana	71.1	18.6	39.6	27.0	14.9	7.0	0.4	1.8	0.1	0.1	52.5	42.5	5.4
Illinois	71.8	18.4	38.8	27.6	15.2	12.8	1.4	3.0	0.5	0.1	52.7	43.3	3.3
Michigan	71.0	19.3	40.5	26.5	13.7	11.8	0.7	1.4	0.2	0.2	52.1	42.2	5.4
Wisconsin	72.3	18.9	38.3	26.5	16.3	2.8	0.7	(4)	0.2	0.3	52.1	42.7	7.9
West North Central:													
Minnesota	72.1	19.2	39.6	25.2	16.0	1.0	0.9	(4)	0.2	0.5	52.2	43.2	8.3
Iowa	72.3	17.4	36.9	27.5	18.2	1.4	0.1	(4)	0.1	0.1	52.7	43.1	4.3
Missouri	73.0	18.0	37.5	26.6	17.8	10.8	0.8	(4)	0.2	0.1	53.1	44.6	5.4
North Dakota	70.9	19.6	35.4	27.8	17.2	0.4	2.4	(4)	0.1	1.6	49.9	43.9	6.1
South Dakota	70.7	18.7	34.2	28.4	18.7	0.4	5.0	(4)	0.1	3.5	51.1	45.2	3.0
Nebraska	72.1	18.6	37.0	26.5	17.9	2.9	0.9	(4)	0.2	0.4	52.3	44.5	5.0
Kansas	73.3	18.7	37.2	26.9	17.2	4.3	1.1	(4)	0.2	0.4	51.9	44.0	7.1
South Atlantic:													
Delaware	72.5	19.9	39.6	26.7	13.8	13.7	0.4	(4)	0.3	0.1	52.5	41.4	4.0
Maryland	73.3	19.2	41.0	27.0	12.7	20.1	1.4	(4)	0.5	0.1	52.2	41.2	5.3
District of Columbia	74.8	21.0	39.3	24.6	15.1	66.5	2.0	(4)	0.8	0.1	55.1	40.2	-6.3
Virginia	73.2	20.1	40.3	26.6	13.0	17.4	1.2	(4)	0.4	0.1	51.4	40.3	7.3
West Virginia	71.5	15.5	37.8	30.0	16.8	3.1	0.5	(4)	0.1	(Z)	52.9	45.2	4.5
North Carolina	71.8	18.4	40.1	27.0	14.5	19.6	1.1	(4)	0.1	0.7	52.1	40.8	6.4
South Carolina	69.7	19.7	40.8	26.1	13.5	27.7	0.6	(4)	0.1	0.1	51.9	40.1	7.6
Georgia	70.2	19.4	41.5	25.3	13.8	23.9	0.5	(4)	0.1	0.1	52.7	40.4	7.0
Florida	73.5	15.5	32.7	27.3	24.5	11.6	0.9	5.8	0.2	0.1	53.0	46.5	12.4
East South Central:													
Kentucky	70.9	18.2	39.1	27.0	15.6	6.9	0.4	(4)	0.1	(Z)	52.1	43.0	6.6
Tennessee	72.2	17.2	39.8	27.3	15.7	14.0	0.4	(4)	0.1	0.1	53.0	42.6	7.8
Alabama	70.8	18.1	38.7	27.2	15.9	22.5	0.6	(4)	0.1	0.1	53.2	42.8	7.8
Mississippi	67.3	19.0	38.3	25.8	17.0	31.2	0.5	(4)	0.1	0.2	53.0	43.2	6.2
West South Central:													
Arkansas	71.2	16.5	37.1	26.9	19.5	13.9	2.7	(4)	0.1	0.1	52.8	45.5	6.2
Louisiana	68.4	20.0	39.9	26.2	13.8	27.3	0.5	(4)	0.1	0.1	52.6	41.5	8.3
Oklahoma	72.1	17.6	38.1	27.1	17.2	6.5	3.7	(4)	0.2	3.3	52.5	44.2	8.6
Texas	69.9	19.3	40.5	26.3	13.8	11.7	0.6	13.4	0.2	0.2	52.1	41.4	12.1
Mountain:													
Montana	70.7	18.5	38.3	28.1	15.1	0.3	3.6	(4)	0.2	2.9	50.4	43.6	8.5
Idaho	67.9	18.7	39.5	27.1	14.8	0.3	1.4	(4)	0.5	0.8	50.8	43.2	13.4
Wyoming	69.6	19.4	40.2	29.4	10.9	1.8	1.9	(4)	0.3	1.2	50.4	42.7	24.5
Colorado	71.8	20.5	42.5	25.1	11.9	3.4	1.4	8.4	0.6	0.4	51.5	40.2	14.4
New Mexico	68.1	21.0	39.0	26.9	13.1	1.7	6.8	2.6	0.3	5.7	51.6	40.1	13.3
Arizona	69.8	18.5	37.8	26.3	17.3	2.7	5.1	12.1	0.5	4.1	51.7	41.9	16.5
Utah	62.9	22.8	40.6	24.4	12.1	0.2	1.9	(4)	0.7	0.8	51.8	39.2	15.5
Nevada	71.3	19.0	39.3	29.4	12.3	5.8	1.9	(4)	0.7	1.4	49.4	40.5	25.4
Pacific:													
Washington	72.7	18.6	41.2	25.9	14.3	2.2	2.9	(4)	1.3	0.8	51.1	42.3	17.0
Oregon	72.8	17.0	40.1	27.1	15.8	1.3	1.7	(4)	0.7	0.5	52.1	44.1	15.1
California	73.2	18.5	40.2	27.3	14.0	7.3	5.1	9.8	2.8	0.4	51.7	41.6	10.6
Alaska	64.1	24.4	49.0	22.3	4.3	3.1	15.2	(4)	1.0	4.5	43.2	33.9	0.4
Hawaii	70.7	22.3	39.7	26.8	11.3	1.3	61.5	(4)	49.8	0.2	47.6	38.3	8.6

(Z) Less than .005.

[1]Other races is comprised principally of American Indians, Asian Americans, and Pacific Islanders.

[2]Persons whose origin or descent was Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish. U.S. all-ages percentage is 4.5. Dark ruled percentages for divisions and regions based on population all-ages.

[3]Includes persons indicating their race as Japanese, Chinese, Korean, Filipino.

[4]Data not available where less than 100,000 persons of Spanish origin in State.

Table 3. Estimates of the Population of Voting Age by State: November 1960 to 1980

(In thousands. For years prior to 1972, population of voting age includes persons 18 years old and over in Georgia and Kentucky, 19 and over in Alaska, 20 and over in Hawaii, and 21 and over in all other States. Beginning 1972 comprises persons 18 years old and over in each State. Includes Armed Forces stationed in each State)

Region, division, and State	1980	1978	1976	1974	1972	1970	1968	1966	1964	1962	1960
United States	160,491	155,712	150,127	145,035	140,068	124,498	120,285	116,638	114,090	112,952	109,672
Regions:											
Northeast	36,061	35,658	35,171	34,522	34,090	30,799	30,209	29,749	29,399	29,251	28,616
North Central	42,066	41,253	40,036	39,069	38,163	34,039	33,100	32,299	31,720	31,805	31,297
South	51,945	50,017	47,894	45,793	43,507	38,388	36,803	35,389	34,433	33,642	32,601
West	30,418	28,784	27,026	25,652	24,308	21,272	20,172	19,201	18,536	18,234	17,158
Northeast:											
New England	9,112	8,917	8,666	8,438	8,237	7,337	7,128	6,955	6,833	6,781	6,609
Middle Atlantic	26,950	26,742	26,505	26,083	25,853	23,462	23,081	22,794	22,566	22,470	22,007
North Central:											
East North Central	29,598	29,076	28,277	27,653	27,010	24,132	23,498	22,903	22,382	22,367	21,955
West North Central	12,468	12,176	11,759	11,416	11,153	9,907	9,604	9,396	9,338	9,458	9,342
South:											
South Atlantic	25,736	24,897	23,880	22,930	21,605	19,047	18,182	17,365	16,771	16,212	15,616
East South Central	10,089	9,765	9,410	9,052	8,711	7,841	7,610	7,431	7,302	7,196	7,087
West South Central	16,121	15,355	14,604	13,810	13,191	11,501	11,011	10,593	10,362	10,256	9,898
West:											
Mountain	7,661	7,159	6,635	6,270	5,797	4,838	4,590	4,388	4,295	4,189	3,947
Pacific	22,757	21,626	20,391	19,381	18,511	16,414	15,582	14,813	14,241	14,045	13,211
New England:											
Maine	790	771	743	714	683	601	592	589	585	585	588
New Hampshire	657	621	578	551	520	452	427	408	398	391	376
Vermont	359	345	330	316	306	265	252	240	232	233	231
Massachusetts	4,298	4,222	4,133	4,054	3,968	3,538	3,459	3,391	3,349	3,333	3,266
Rhode Island	687	680	669	654	671	596	573	554	545	548	540
Connecticut	2,321	2,278	2,213	2,149	2,089	1,886	1,826	1,773	1,724	1,679	1,608
Middle Atlantic:											
New York	12,900	12,870	12,863	12,701	12,663	11,543	11,450	11,403	11,324	11,247	10,965
New Jersey	5,398	5,287	5,187	5,070	4,997	4,507	4,358	4,232	4,142	4,089	3,919
Pennsylvania	8,652	8,585	8,455	8,312	8,193	7,412	7,273	7,159	7,100	7,135	7,122
East North Central:											
Ohio	7,701	7,601	7,420	7,296	7,123	6,419	6,252	6,080	5,962	5,989	5,888
Indiana	3,849	3,777	3,653	3,577	3,496	3,104	3,003	2,915	2,845	2,836	2,799
Illinois	8,046	7,955	7,791	7,612	7,532	6,795	6,567	6,362	6,222	6,430	6,298
Michigan	6,557	6,414	6,220	6,077	5,868	5,200	5,032	4,885	4,719	4,665	4,598
Wisconsin	3,446	3,328	3,193	3,090	2,991	2,613	2,543	2,481	2,434	2,426	2,372
West North Central:											
Minnesota	2,957	2,854	2,730	2,631	2,546	2,248	2,156	2,082	2,050	2,062	2,017
Iowa	2,093	2,069	2,007	1,958	1,936	1,712	1,673	1,641	1,625	1,661	1,666
Missouri	3,569	3,494	3,386	3,306	3,228	2,913	2,813	2,751	2,709	2,726	2,706
North Dakota	469	457	442	425	413	360	354	358	362	359	357
South Dakota	485	482	471	459	447	389	384	385	393	404	393
Nebraska	1,138	1,116	1,084	1,056	1,030	906	881	863	879	893	868
Kansas	1,756	1,703	1,639	1,581	1,553	1,380	1,346	1,316	1,318	1,352	1,334
South Atlantic:											
Delaware	420	415	404	390	378	326	314	301	292	284	272
Maryland	3,039	2,976	2,885	2,783	2,690	2,372	2,271	2,174	2,085	1,966	1,867
District of Columbia	475	492	507	515	530	483	495	506	513	527	513
Virginia	3,817	3,721	3,556	3,375	3,202	2,823	2,717	2,608	2,539	2,456	2,349
West Virginia	1,357	1,327	1,293	1,240	1,221	1,077	1,061	1,049	1,049	1,051	1,075
North Carolina	4,055	3,953	3,805	3,677	3,496	3,043	2,921	2,798	2,723	2,647	2,585
South Carolina	2,069	2,001	1,923	1,842	1,748	1,487	1,427	1,373	1,333	1,293	1,272
Georgia	3,629	3,519	3,391	3,251	3,098	2,985	2,851	2,717	2,634	2,546	2,507
Florida	6,876	6,494	6,116	5,856	5,242	4,451	4,124	3,839	3,623	3,442	3,176
East South Central:											
Kentucky	2,532	2,456	2,376	2,284	2,204	2,136	2,063	1,996	1,964	1,950	1,950
Tennessee	3,205	3,092	2,974	2,859	2,758	2,410	2,325	2,254	2,212	2,165	2,110
Alabama	2,702	2,609	2,506	2,406	2,314	2,042	1,993	1,968	1,919	1,874	1,850
Mississippi	1,650	1,608	1,554	1,505	1,435	1,253	1,229	1,213	1,207	1,205	1,177
West South Central:											
Arkansas	1,562	1,528	1,471	1,420	1,354	1,180	1,143	1,119	1,108	1,085	1,049
Louisiana	2,780	2,689	2,567	2,443	2,373	2,058	2,002	1,950	1,894	1,859	1,813
Oklahoma	2,131	2,044	1,963	1,872	1,809	1,605	1,540	1,489	1,471	1,478	1,431
Texas	9,648	9,093	8,603	8,075	7,655	6,658	6,327	6,035	5,889	5,832	5,605
Mountain:											
Montana	560	544	516	494	469	410	403	402	402	403	395
Idaho	634	600	559	528	491	418	397	384	379	385	377
Wyoming	335	299	269	245	229	198	190	184	192	193	192
Colorado	2,050	1,929	1,792	1,710	1,586	1,328	1,251	1,171	1,142	1,124	1,056
New Mexico	869	818	767	717	671	561	539	532	530	517	504
Arizona	1,779	1,652	1,527	1,444	1,295	1,056	975	917	878	836	760
Utah	901	841	780	741	699	583	551	530	512	506	479
Nevada	533	476	425	390	357	303	284	268	260	226	184
Pacific:											
Washington	2,978	2,749	2,546	2,419	2,306	2,078	1,975	1,833	1,756	1,774	1,727
Oregon	1,909	1,783	1,638	1,581	1,503	1,308	1,231	1,185	1,141	1,111	1,079
California	16,956	16,201	15,326	14,595	13,969	12,376	11,771	11,220	10,789	10,622	9,895
Alaska	257	262	256	213	197	178	166	158	153	148	139
Hawaii	657	631	605	574	536	473	439	417	404	390	371

Table 4. Estimates of the Percent Casting Votes for Presidential Electors and U.S. Representatives, by State: November 1960 to 1978

(Total votes cast as a percent of the population of voting age. For years prior to 1972, population of voting age includes persons 18 years old and over in Georgia and Kentucky, 19 and over in Alaska, 20 and over in Hawaii, and 21 and over in all other States. Beginning 1972 comprises persons 18 years old and over in each State.

Region, division, and State	Percent casting votes for Presidential electors[1]					Percent casting votes for U.S. Representatives[2]									
	1976	1972	1968	1964	1960	1978	1976	1974	1972	1970	1968	1966	1964	1962	1960
United States	54.4	55.4	60.7	61.8	63.1	35.1	49.6	36.1	50.9	43.8	55.2	45.4	57.8	46.3	58.7
Regions:															
Northeast	55.9	58.5	63.7	66.7	70.4	38.5	52.0	41.0	54.9	48.8	59.0	51.8	63.0	54.1	67.7
North Central	60.3	60.7	67.1	70.0	73.4	41.1	56.8	41.7	58.0	50.1	63.4	50.9	67.6	53.7	70.5
South	48.4	46.1	52.0	47.6	44.7	24.7	40.6	24.6	38.2	30.2	42.2	29.9	48.8	26.1	32.5
West	54.1	59.4	61.7	63.9	66.6	40.3	51.5	41.7	57.1	50.4	59.3	54.6	64.1	52.5	63.5
Northeast:															
New England	61.7	63.1	67.7	70.0	75.4	43.6	58.5	45.0	58.4	52.9	62.5	54.8	66.3	58.2	71.6
Middle Atlantic	54.0	57.1	62.4	65.8	68.9	36.9	49.9	39.7	53.8	47.6	57.9	50.8	62.1	52.8	66.4
North Central:															
East North Central	59.4	60.3	66.8	70.0	73.3	39.3	55.5	40.6	57.0	50.3	62.9	51.2	67.4	55.1	70.5
West North Central	62.5	61.8	67.7	70.1	73.6	45.4	59.8	44.3	60.4	49.7	64.7	50.0	68.0	50.3	70.4
South:															
South Atlantic	47.6	45.9	51.8	48.3	44.9	26.0	39.9	25.6	38.9	31.6	44.9	30.5	41.2	26.1	39.6
East South Central	48.8	45.0	52.7	45.0	44.1	27.7	41.0	27.0	41.9	32.1	42.6	34.5	40.6	25.0	32.6
West South Central	49.4	47.0	52.0	48.4	45.0	20.8	41.6	21.5	34.6	26.5	37.5	25.8	40.4	25.9	35.0
West:															
Mountain	57.4	59.1	63.0	66.0	67.0	39.8	55.9	45.6	57.4	50.0	60.5	53.2	65.1	53.6	66.6
Pacific	53.0	59.6	61.3	65.6	66.5	40.5	50.1	40.4	57.0	50.5	59.0	55.0	63.8	52.1	63.1
New England:															
Maine	65.0	61.1	66.4	65.1	71.7	47.9	63.6	49.5	60.5	52.9	64.9	53.1	63.2	48.0	69.5
New Hampshire	58.8	64.2	69.5	71.8	78.7	41.6	56.2	39.8	60.6	47.4	66.2	56.1	70.1	56.5	75.7
Vermont	55.7	60.8	64.0	70.4	72.4	35.0	56.0	44.5	60.8	57.5	62.3	56.7	70.5	52.0	71.8
Massachusetts	61.6	62.0	67.4	70.0	75.6	42.9	56.7	41.9	54.4	50.9	59.5	53.4	63.0	59.1	69.2
Rhode Island	61.4	62.0	67.2	71.6	75.2	45.3	58.2	46.5	57.8	54.6	63.7	57.9	68.5	58.1	72.7
Connecticut	62.6	66.3	68.8	70.7	76.1	44.8	60.9	50.2	64.7	56.8	66.1	56.6	70.2	61.9	75.8
Middle Atlantic:															
New York	51.8	56.6	59.3	63.4	67.3	34.0	46.6	38.5	52.1	47.2	53.3	48.3	59.7	49.4	64.0
New Jersey	58.1	60.0	66.0	68.7	70.8	36.6	54.2	41.1	56.7	46.6	61.9	49.6	65.7	47.9	67.8
Pennsylvania	54.7	56.0	65.3	67.9	70.3	41.3	52.4	40.6	54.5	48.7	62.9	55.4	63.7	61.0	69.4
East North Central:															
Ohio	55.4	57.5	63.3	66.6	70.7	36.6	51.8	40.4	53.9	47.4	58.2	46.0	62.6	50.1	65.3
Indiana	60.8	60.8	70.7	73.5	76.3	38.4	57.6	48.4	60.4	55.7	67.9	57.9	72.9	63.2	75.8
Illinois	60.6	62.7	69.3	73.2	75.5	38.3	56.0	37.3	58.2	51.3	66.3	57.1	71.2	55.9	73.0
Michigan	58.7	59.5	65.7	67.9	72.2	42.2	55.2	41.5	55.8	49.3	60.5	48.5	66.8	57.5	70.1
Wisconsin	65.8	62.0	66.5	69.5	72.9	43.6	61.4	38.7	60.2	50.7	64.5	46.5	67.7	51.3	70.1
West North Central:															
Minnesota	71.4	68.4	73.8	75.8	76.4	53.4	65.7	46.3	66.4	59.4	71.2	58.6	74.2	58.6	75.1
Iowa	65.7	63.3	69.8	72.9	76.5	39.2	61.9	46.1	61.8	45.5	67.2	53.6	70.3	48.3	73.6
Missouri	57.7	57.3	64.3	67.1	71.5	44.2	56.2	36.6	56.8	41.1	61.2	38.0	65.6	44.5	68.1
North Dakota	67.2	68.0	70.1	71.4	77.9	48.2	65.5	54.9	65.1	58.4	66.8	55.0	68.8	60.3	71.8
South Dakota	63.9	68.7	73.2	74.1	77.6	53.0	62.7	59.4	67.3	60.4	70.7	58.4	72.8	62.3	76.3
Nebraska	56.0	55.9	60.9	66.4	70.6	44.3	55.5	42.4	55.2	49.5	59.3	54.6	63.8	49.9	66.9
Kansas	58.4	59.0	64.8	65.1	69.7	39.7	55.5	49.0	56.5	52.2	60.7	50.2	61.7	46.3	65.3
South Atlantic:															
Delaware	58.4	62.4	68.3	69.0	72.2	38.0	53.3	41.1	59.8	49.2	64.0	54.2	68.1	54.0	71.7
Maryland	49.6	50.3	54.4	54.1	56.5	31.1	45.6	31.4	45.3	37.3	44.9	35.2	49.0	36.6	52.5
District of Columbia	33.3	30.8	34.4	38.7	-	19.6	31.9	21.0	29.6	-	-	-	-	-	-
Virginia	47.7	45.5	50.1	41.1	32.8	28.4	41.1	27.4	39.7	32.0	46.7	26.2	36.6	18.2	27.2
West Virginia	58.1	62.4	71.1	75.5	78.0	33.4	52.1	33.5	59.0	40.7	67.1	47.1	73.4	58.4	76.3
North Carolina	44.1	43.4	54.3	52.3	52.9	25.8	41.3	26.9	38.6	30.6	47.9	32.7	47.9	30.9	50.4
South Carolina	41.7	38.6	46.7	39.4	30.4	28.7	40.7	28.1	36.1	28.7	44.0	26.5	32.9	20.3	25.8
Georgia	43.1	37.9	43.4	43.3	29.2	16.7	36.9	25.3	28.8	29.5	33.1	31.3	31.7	13.1	22.9
Florida[3]	51.5	49.3	53.0	51.2	48.6	24.9	34.0	18.1	36.9	28.1	42.9	27.5	39.1	27.3	39.3
East South Central:															
Kentucky	49.1	48.4	51.2	53.3	57.6	19.4	41.6	29.7	44.7	22.2	41.9	33.9	48.6	32.4	46.8
Tennessee	49.6	43.6	53.7	51.7	49.8	34.4	42.1	31.5	40.0	41.0	43.6	35.5	44.8	28.0	30.5
Alabama	47.2	43.5	52.7	35.9	30.8	24.6	39.3	23.4	42.0	36.3	45.7	33.8	32.2	23.8	23.7
Mississippi	49.5	45.0	53.2	33.9	25.3	32.3	41.0	20.3	41.0	24.9	36.5	31.6	29.9	13.4	21.9
West South Central:															
Arkansas[3]	52.2	47.9	53.3	50.6	40.8	19.2	22.9	29.8	13.8	14.7	26.1	26.1	11.7	16.7	34.0
Louisiana[3]	49.8	44.3	54.8	47.3	44.6	6.9	39.5	22.4	28.6	17.6	31.4	28.0	31.7	18.6	28.7
Oklahoma[3]	55.6	56.9	61.2	63.4	63.1	28.8	54.4	27.0	45.2	42.1	52.6	42.7	57.1	42.3	58.4
Texas	47.3	45.3	48.7	44.6	41.2	24.0	42.6	18.4	37.7	27.5	37.9	20.8	44.4	25.8	36.4
Mountain:															
Montana	63.7	67.8	68.0	69.4	70.3	52.0	62.2	51.4	67.2	60.8	65.3	64.2	68.9	61.7	69.0
Idaho	61.0	63.1	73.3	77.2	79.7	47.5	61.1	47.4	61.5	56.0	69.6	65.6	75.1	66.1	77.0
Wyoming	58.2	65.8	67.1	74.2	72.7	43.2	56.5	51.7	63.8	58.6	65.0	64.7	72.4	60.5	69.8
Colorado	60.3	60.2	64.5	68.0	69.7	40.7	57.0	45.9	57.6	48.0	62.4	54.7	66.3	53.1	67.7
New Mexico	54.3	57.5	60.7	61.9	61.7	34.8	52.3	44.1	55.7	50.2	57.5	49.8	65.9	52.1	59.8
Arizona	48.6	50.5	49.9	54.8	52.4	31.4	47.7	37.7	45.9	38.1	47.5	39.7	52.5	41.7	49.6
Utah	69.4	68.4	76.7	78.2	78.2	45.1	69.7	55.8	71.7	63.9	73.5	57.9	77.3	62.7	77.1
Nevada	47.5	51.0	54.4	52.1	58.3	38.5	47.0	43.1	50.4	45.4	50.9	47.8	50.3	41.3	56.3
Pacific:															
Washington	61.1	63.8	66.0	71.7	71.9	35.6	56.0	40.6	56.5	49.2	61.0	51.2	68.2	49.7	65.1
Oregon	62.1	61.7	66.4	68.9	71.8	49.0	55.9	47.6	57.9	49.9	63.9	56.1	67.3	56.8	70.6
California	50.9	59.1	60.4	63.6	65.8	40.3	48.6	39.4	57.3	51.1	58.5	55.9	63.3	52.3	62.7
Alaska	48.2	48.2	49.9	43.9	43.7	47.4	46.1	43.1	48.2	44.9	48.3	41.8	43.9	40.9	42.5
Hawaii	48.2	50.4	53.8	51.3	49.7	40.2	48.6	45.2	51.3	44.0	55.3	49.9	56.9	49.9	49.2

- Represents zero.

[1] Based on votes cast as shown in U.S. Congress, Clerk of the House, Statistics of the Presidential and Congressional Election and Statistics of the Congressional Election.

[2] State law does not require tabulation of votes in uncontested elections.

Table 5. Participation in Elections for President and U.S. Representatives: 1930 to 1976

(Numbers in thousands. As of November 1. Includes Armed Forces. Prior to 1960, excludes Alaska and Hawaii)

Year	Population of voting age[1]	Vote cast				Year	Population of voting age[1]	Vote cast			
		For President	Percent of voting-age population	For U.S. Representatives	Percent of voting-age population			For President	Percent of voting-age population	For U.S. Representatives	Percent of voting-age population
1930	73,623	(X)	(X)	24,777	33.7	1954	102,075	(X)	(X)	42,580	41.7
1932	75,768	39,732	52.4	37,657	49.7	1956	104,515	62,027	59.3	58,428	55.9
1934	77,997	(X)	(X)	32,256	41.4	1958	106,447	(X)	(X)	45,818	43.0
1936	80,174	45,643	56.9	42,886	53.5	1960	109,672	68,838	63.1	64,133	58.7
1938	82,354	(X)	(X)	36,236	44.0	1962	112,952	(X)	(X)	51,261	46.3
1940	84,728	49,900	58.9	46,951	55.4	1964	114,090	70,645	61.8	65,886	57.8
						1966	116,638	(X)	(X)	52,900	45.4
1942	86,465	(X)	(X)	28,074	32.5	1968	120,285	73,212	60.7	66,109	55.2
1944	85,654	47,977	56.0	45,103	52.7	1970	124,498	(X)	(X)	54,173	43.8
1946	92,659	(X)	(X)	34,398	37.1	1972	140,068	77,625	55.4	71,188	50.9
1948	95,573	48,794	51.1	45,933	48.1	1974	145,035	(X)	(X)	52,397	36.1
1950	98,134	(X)	(X)	40,342	41.1	1976	150,127	81,603	54.4	74,419	49.6
1952	99,929	61,551	61.6	57,571	57.6	1978	155,712	(X)	(X)	54,680	35.1

X Not applicable.

[1]Population 18 and over beginning 1972; prior to 1972 population 21 and over except population 18 and over in Georgia since 1944, 18 and over in Kentucky since 1956, 19 and over in Alaska, and 20 and over in Hawaii.

Source: For voting data: U.S. Congress, Clerk of the House Statistics of the Presidential and Congressional Election and Statistics of the Congressional Election; and Elections Research Center, Washington, D.C., America Votes (copyright).